## **EAST Search History**

| Ref # | Hits | Search Query  | DBs                | Default<br>Operator | Plurals | Time Stamp          |
|-------|------|---|--------------------|---------------------|---------|---------------------|
| S1    | 14   | (non\$1woven or (non<br>adj woven)) near3<br>(sheet layer web)<br>and (thermoplastic<br>near3 (sheet layer<br>web)) and (energy<br>adj2 difference)   | US-PGPUB;<br>USPAT | OR                  | ON      | 2009/05/11<br>17:55 |
|       | 299  | (US-20080140025-\$). did. or (US-4279350-\$). did. or (US-4279350-\$ or US-4361391-\$ or US-5603467-\$ or US-5603467-\$ or US-6234570-\$ or US-4256314-\$ or US-4256314-\$ or US-4322060-\$ or US-4450598-\$ or US-4450598-\$ or US-4450598-\$ or US-4512519-\$ or US-4512519-\$ or US-4512519-\$ or US-4515082-\$ or US-4516957-\$ or US-45628347-\$ or US-45628347-\$ or US-4792685-\$ or US-4794224-\$ or US-478765-\$ or US-4794265-\$ or US-4794265-\$ or US-4794285-\$ or US-4794385-\$ or US-574944-\$ or US-5749885-\$ or US-574944-\$ or US-574944-\$ or US-574944-\$ or US-574944-\$ or US-5749885-\$ or US-574984-\$ or US-5749 | US-PGPUB;<br>USPAT | OR                  | ON      | 2009/05/11          |

| 5359783-\$ o<br>5365759-\$ o<br>5591888-\$ o<br>5606654-\$ o<br>5614747-\$ o<br>5638345-\$ o<br>568895-\$ o<br>568895-\$ o<br>5815062-\$ o<br>5915062-\$ o<br>5915062-\$ o<br>6018866-\$),<br>(US-607994<br>6184719-\$ o<br>6211972-\$ o<br>642874-\$ o      | TO US   |  |  |
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| 4357998-\$ c 4397273-\$ c 4396326-\$ c 4397273-\$ c 4422689-\$ c 4428731-\$ c 4428689-\$ c 4438514-\$ c 443785-\$ c 443988-\$ c 4442805-\$), (US-446833 4476647-\$ c 4487430-\$ c 4501467-\$ c 450224-\$ c 450224-\$ c 4511205-\$ c 451205-\$ c 4529869-\$ c | TO US |  |  |

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| 4789304-\$).did. or                     |         |
| (US-4805658-\$ or US-                   |         |
| 4847127-\$ or US-                       |         |
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| 4903916-\$ or US-                       |         |
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| 4940348-\$ or US-                       |         |
| 4955571-\$ or US-                       |         |
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| 5003217-\$ or US-                       |         |
| 5016827-\$ or US-                       |         |
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| PP08130-\$ or US-                       |         |
| 5193924-\$ or US-                       |         |
| 5203432-\$ or US-                       |         |
| 5213050-\$ or US-                       |         |
| 5220170-\$ or US-                       |         |
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| 5230291-\$ or US-                       |         |
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| 5275862-\$ or US-                       |         |
| 5287838-\$ or US-                       |         |
| 5316418-\$ or US-                       |         |
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| (US-5351565-\$ or US-                   |         |
| 5374788-\$ or US-                       |         |
| 5392752-\$ or US-                       |         |
| 5420124-\$ or US-                       |         |
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| 5421494-\$ or US-     | -                                       |     |   |  |
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| 5443191-\$ or US-     | *****                                   |     |   |  |
| PP09289-\$ or US-     |   |     |   |  |
| 5455858-\$ or US-     |   |     |   |  |
| 5458101-\$ or US-     | *************************************** |     |   |  |
| 5470163-\$ or US-     | -                                       |     |   |  |
| 5474494-\$ or US-     |   |     |   |  |
| 5488677-\$ or US-     | -                                       |     |   |  |
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| 5500074-\$ or US-     | *************************************** |     |   |  |
| 5502893-\$ or US-     |   |     |   |  |
| 5525569-\$ or US-     |   |     |   |  |
| 5547080-\$ or US-     | ***                                     |     |   |  |
| 5583708-\$ or US-     | -                                       |     |   |  |
| 5594573-\$ or US-     |   |     |   |  |
| 5607193-\$ or US-     | ****                                    |     |   |  |
| 5622477-\$ or US-     | 1                                       |     |   |  |
| 5640944-\$ or US-     |   |     |   |  |
| 5646911-\$ or US-     |   |     |   |  |
| 5658308-\$ or US-     | *****                                   |     |   |  |
| 5660056-\$ or US-     | *****                                   |     |   |  |
| 5668536-\$ or US-     |   |     |   |  |
| 5690146-\$).did. or   | -                                       |     |   |  |
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| (US-5711596-\$ or US- | ****                                    |     |   |  |
| 5772972-\$ or US-     | 1                                       |     |   |  |
| 5802296-\$ or US-     |   |     |   |  |
| 5807623-\$ or US-     | 1                                       |     |   |  |
| 5813357-\$ or US-     | 1                                       |     |   |  |
| 5834747-\$ or US-     |   |     |   |  |
| 5850967-\$ or US-     | *************************************** |     |   |  |
| 5890261-\$ or US-     |   |     |   |  |
| 5907219-\$ or US-     | 1                                       |     | 1                                       |  |
| 5957453-\$ or US-     |   |     |   |  |
| 5986422-\$ or US-     | *****                                   |     |   |  |
| 5983864-\$ or US-     | į                                       |     | l                                       |  |
| 6032360-\$ or US-     |   |     |   |  |
| 6036376-\$ or US-     |   |     |   |  |
| 6040818-\$ or US-     | ****                                    |     |   |  |
| 6060899-\$ or US-     |   |     |   |  |
| 6081106-\$ or US-     | ***                                     |     |   |  |
| 6170898-\$ or US-     | ***                                     |     |   |  |
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| 6186885-\$ or US-     | ***                                     |     | ***                                     |  |
| 6233464-\$ or US-     | -                                       |     |   |  |
| 6237934-\$ or US-     |   |     |   |  |
| 6237945-\$ or US-     | ****                                    |     |   |  |
| 6326372-\$ or US-     | 1                                       |     | *************************************** |  |
| 6440928-\$ or US-     |   |     |   |  |
| 6037936-\$ or US-     | ****                                    |     |   |  |
| 4251850-\$ or US-     |   |     |   |  |
| 4258439-\$).did. or   |   |     |   |  |
| (US-4261461-\$ or US- |   |     |   |  |
| 4262849-\$ or US-     |   |     |   |  |
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| 4264401-\$ or US-     |   |   |     |  |
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| 4266107-\$ or US-     |   |   |     |  |
| 4268087-\$ or US-     |   |   |     |  |
| 4269532-\$ or US-     |   |   |     |  |
| 4270298-\$ or US-     |   |   |     |  |
| 4297059-\$ or US-     |   |   |     |  |
| 4304739-\$ or US-     |   |   |     |  |
| 4304483-\$ or US-     |   |   |     |  |
| 4308435-\$ or US-     |   |   |     |  |
| 4309838-\$ or US-     |   |   | -   |  |
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| 4312128-\$ or US-     |   |   |     |  |
| 4313552-\$ or US-     |   |   | *** |  |
| 4321767-\$ or US-     |   |   |     |  |
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| 4328951-\$ or US-     |   |   |     |  |
| 4332310-\$ or US-     |   |   |     |  |
| 4334837-\$ or US-     |   |   |     |  |
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| 4344384-\$ or US-     |   |   | -   |  |
| 4345124-\$ or US-     |   |   | *   |  |
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| (US-4373789-\$ or US- |   |   | *** |  |
| 4379571-\$ or US-     |   |   | -   |  |
| 4389675-\$ or US-     |   |   |     |  |
| 4392570-\$ or US-     |   |   | -   |  |
| 4396411-\$ or US-     |   |   |     |  |
| 4397117-\$ or US-     |   |   |     |  |
| 4408487-\$ or US-     |   |   |     |  |
| 4411624-\$ or US-     |   |   |     |  |
| 4415112-\$ or US-     |   |   |     |  |
| 4415298-\$ or US-     |   |   |     |  |
| 4428323-\$ or US-     |   |   |     |  |
| 4442595-\$ or US-     |   |   | *** |  |
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| 4465315-\$ or US-     |   |   |     |  |
| 4469089-\$ or US-     |   |   |     |  |
| 4488238-\$ or US-     |   |   |     |  |
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| 4490039-\$ or US-     |   |   |     |  |
| 4493826-\$ or US-     |   |   |     |  |
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| 4502189-\$ or US-     |   |   |     |  |
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|   | 4531956-\$ or US-     |  |     |   |  |
|   | 4533684-\$ or US-     |  |     |   |  |
|   | 4535969-\$ or US-     |  |     |   |  |
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|   | 4554332-\$ or US-     |  |     |   |  |
|   | 4555733-\$ or US-     |  |     |   |  |
|   | 4557520-\$ or US-     |  |     |   |  |
|   | 4569175-\$ or US-     |  |     |   |  |
|   | 4571627-\$ or US-     |  |     |   |  |
|   | 4576459-\$ or US-     |  |     |   |  |
| ļ | 4577288-\$ or US-     |  |     |   |  |
|   | 4580565-\$ or US-     |  |     |   |  |
|   | 4580554-\$ or US-     |  |     |   |  |
|   | 4588254-\$ or US-     |  |     |   |  |
|   | 4589854-\$ or US-     |  | *** |   |  |
|   | 4589379-\$ or US-     |  |     |   |  |
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|   | 4598614-\$ or US-     |  | *** |   |  |
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|   | 4759159-\$ or US-     |  |     |   |  |
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|   | (US-4769425-\$ or US- |  |     |   |  |
|   | 4770727-\$ or US-     |  | *** |   |  |
|   | 4778861-\$ or US-     |  |     |   |  |
|   | 4781705-\$ or US-     |  |     |   |  |
|   | 4786691-\$ or US-     |  |     | ***                                     |  |
|   | 4790636-\$ or US-     |  | *** |   |  |
|   | 4790709-\$ or US-     |  |     |   |  |
|   | 4790878-\$ or US-     |  |     |   |  |
|   | 4791179-\$ or US-     |  |     |   |  |
|   | 4792355-\$ or US-     |  | *** |   |  |
|   | 4794149-\$ or US-     |  | *** |   |  |
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|   | 4804392-\$ or US-     |  |     |   |  |
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|   | 4812535-\$ or US-     |  |     |   |  |
|   | 4826818-\$ or US-     |  |     |   |  |
|   | 4829319-\$ or US-     |  |     |   |  |
|   | 4830680-\$ or US-     |  |     |   |  |
|   | 4831644-\$ or US-     |  |     | 4                                       |  |
|   | 4837555-\$ or US-     |  |     |   |  |
| - | 4840667-\$ or US-     |  |     | *************************************** |  |
|   | 4843437-\$ or US-     |  |     |   |  |
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|            |    | 4852132-\$ or US-<br>4856666-\$ or US-<br>4858356-\$ or US-<br>4868687-\$).did. or<br>(US-4873036-\$ or US-<br>4878077-\$).did.   | *************************************** | *************************************** | инининининининининининининин |                     |
|------------|----|---|---|---|------------------------------|---------------------|
| S3         | 24 | (non\$1woven or (non<br>adj woven)) near3<br>(sheet layer web)<br>and (thermoplastic<br>near3 (sheet layer<br>web)) and (energy<br>adj2 differen\$4)  | US-PGPUB;<br>USPAT                      | OR                                      |                              | 2009/05/11<br>17:58 |
| S4         | 14 | ((non\$1woven or<br>(non adj woven))<br>near3 (sheet layer<br>web) same2<br>(thermoplastic near3<br>(sheet layer web)))<br>and (energy adj2<br>differen\$4)   | US-PGPUB;<br>USPAT                      | OR                                      | ON                           | 2009/05/11<br>18:00 |
| S5         | 4  | ((non\$1woven or<br>(non adj woven))<br>near3 (sheet layer<br>web) same<br>(thermoplastic near3<br>(sheet layer web)))<br>and (energy adj2<br>differen\$4)  | US-PGPUB;<br>USPAT                      | OR                                      | MON                          | 2009/05/11<br>18:02 |
| <b>S</b> 6 | 0  | ((non\$1woven or<br>(non adj woven))<br>near3 (sheet layer<br>web) and<br>(thermoplastic near3<br>(sheet layer web)))<br>and (energy adj2<br>differen\$4) and ((non<br>\$1woven) or (non adj<br>woven)) with<br>hydrophobic) and<br>(thermoplastic with<br>(hydrophilic)) | US-PGPUB;<br>USPAT                      | OR                                      | ON                           | 2009/05/11<br>18:06 |

| S7 | 0  | ((non\$1woven or (non adj woven)) with (sheet layer web) and (thermoplastic with (sheet layer web))) and (energy adj2 differen\$4) and ((non \$1woven or (non adj woven)) with hydrophobic) and (thermoplastic with (hydrophilic))                                     | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/11<br>18:07 |
|----|----|--|------------------------------|----|----|---------------------|
| S8 | 2  | ((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) and<br>(thermoplastic with<br>(sheet layer web)))<br>and (energy adj2<br>differen\$4) and ((non<br>\$1woven or (non adj<br>woven)) same<br>hydrophobic) and<br>(thermoplastic same<br>(hydrophilic)) | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/11<br>18:07 |
| S9 | 17 | ("4323069"   "4342246"   "4342241"   "4397644"   "4690679"   "4820294"   "5171238"   "5728085"   "5730737"   "5817085"),PN. OR ("6452064"),URPN.   | US-PCPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/11<br>18:10 |

| S10 | 13 | ("4323069"   "4342246"   "4397644"   "4397644"   "4690679"   "4820294"   "5171238"   "5728085"   "5780737"   "5817085").PN. OR ("6452064").URPN. and (energy adj2 differen\$4)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/11<br>18:11 |
|-----|----|--|------------------------------|----|----|---------------------|
| S11 | 1  | "3592194".pn.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>08:08 |
| S12 | 30 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) and<br>((thermoplastic with<br>(sheet layer web)))<br>and (energy adj2<br>differen\$4) and ((non<br>\$1woven or (non adj<br>woven)) and<br>hydrophobic) and<br>(thermoplastic and<br>(hydrophilic)) | US-POPUB;<br>USPAT           | OR | ON | 2009/05/12<br>08:13 |
| S13 | 1  | "6452064".pn. and<br>(energy adj2 differen<br>\$4)   | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/12<br>08:18 |
| S14 | 1  | "6452064".pn. and (surface adj2 energy)  | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/12<br>08:20 |
| S15 | 28 | ("3344789"  <br>"3403681"  <br>"3703897"  <br>"3814101"  <br>"38266341"  <br>"3929673"  <br>"3929135"  <br>"4626254"  <br>"4798603"  <br>"518625"  <br>"5281208"  <br>"5415640"  <br>"5476335"   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>08:21 |

|     |   | "5591149"<br>"5613960"  <br>"5746729"  <br>"5814389"  <br>"5916661"  <br>"5986167"  <br>"6039906"  <br>"6168849"  <br>"6452064").PN. OR<br>("7005558").URPN.   |                    |    |    |                     |
|-----|---|--|--------------------|----|----|---------------------|
| S16 | 2 | ((non\$1woven or (non adj woven)) with (sheet layer web) and (thermoplastic with (sheet layer web))) and (energy adj2 differen\$4) and ((non \$1woven)) same (hydrophobic nonwettable)) and (thermoplastic same (hydrophilic wettable))  | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>08:23 |
| S17 | 8 | i((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) and<br>(thermoplastic with<br>(sheet layer web)))<br>and (energy adj2<br>differen\$4) and ((non<br>\$1woven or (non adj<br>woven)) same2<br>(hydrophobic<br>nonwettable)) and<br>(thermoplastic same2<br>(hydrophilic<br>wettable)) | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>08:23 |

| S18 |    | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(energy adj2 differen<br>\$4) and (first same<br>(hydrophobic<br>nonwettable)) and<br>(second same<br>(hydrophilic<br>wettable)) | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>08:28 |
|-----|----|---|--------------------|----|----|---------------------|
| S19 | 81 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first same<br>(hydrophobic<br>nonwettable)) and<br>(second same<br>(hydrophilic<br>wettable))                                   | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>08:28 |
| S20 | 45 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable))                                   | US-PGPUB;<br>USPAT | ÖR | ON | 2009/05/12<br>08:29 |

| S21 | 23 | [(((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and<br>(second with (porous<br>permeable aperture<br>hole vent perforat<br>\$4))                | US-PGPUB;<br>USPAT | OR   | ON | 2009/05/12<br>08:41 |
|-----|----|--|--------------------|------|----|---------------------|
| S22 | 23 | ((((non\$1woven or (non adj woven)) with (sheet layer web)) same first) and ((thermoplastic with (sheet layer web))) same second) and (first with (hydrophobic nonwettable)) and (second with (hydrophilic wettable)) and (second with (porous permeable aperture hole vent perforat \$44)) and (first (recess indentation hole slot cell cavity break)) | US-PGPUB;<br>USPAT | OR . | ON | 2009/05/12<br>08:46 |
| S23 | 6  | ((((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and   | US-PGPUB;<br>USPAT | OR   |    | 2009/05/12<br>10:48 |

|      | *************************************** | (second with (porous permeable aperture hole vent perforat \$4)) and (first (recess indentation hole slot cell cavity break)) and (second with (exposed unmasked uncovered unconcealed visible))   |                    |      |    |                     |
|------|---|--|--------------------|------|----|---------------------|
| \$24 | 19                                      | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and<br>(second with (porous<br>(liquid adj<br>permeable) aperture<br>hole vent perforat<br>\$4)) and (first<br>(recess indentation<br>hole slot cell cavity<br>break)) | US-PGPUB;<br>USPAT | OA   | ON | 2009/05/12<br>10:53 |
| S25  | 20                                      | (((non\$1woven or (non adj woven)) with (sheet layer web) same first) and (((thermoplastic with (sheet layer web))) same second) and (first with (hydrophobic nonwettable)) and (second with (hydrophilic wettable)) and (second with (porous (liquid adj permeable) (liquid adj permeable) (liquid adj perture hole vent perforat\$4)) and (first (recess   | US-PGPUB;<br>USPAT | OR . | ON | 2009/05/12<br>10:55 |

|              |   | indentation hole slot<br>cell cavity break))  |                    |      |    |            |
|--------------|---|---|--------------------|------|----|------------|
| \$26         | 2 | (((non\$1woven or (non adj woven)) with (sheet layer web) same second) and ((thermoplastic with (sheet layer web))) same first) and (second with (hydrophobic nonwettable)) and (first with (phorophilic wettable)) and (first with (porous (liquid adj permeable) (liquid adj permeable) (liquid adj permeable) (second with (recess indentation hole slot cell cavity break))   | US-PGPUB;<br>USPAT | ŌR   | ON | 2009/05/12 |
| <b>\$</b> 27 | 3 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and<br>(second with (porous<br>(liquid adj<br>permeable) (liquid<br>adj pervious)<br>aperture hole vent<br>perforat\$4)) and<br>(first with (recess<br>indentation hole slot<br>cell cavity break)) | US-PGPUB;<br>USPAT | OR . | ON | 2009/05/12 |

| S28  | 20  | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and<br>(second with (porous<br>(liquid adj<br>permeable) (liquid<br>adj pervious)<br>aperture hole vent<br>perforat\$4)) | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/12          |
|------|-----|--|------------------------------|----|----|---------------------|
| S29  | 111 | ("4421511"   "5306266"   "5417680"   "5462541"   "5520674"   "5624422"   "5674213"   "6017336"   "6022338"   "6133501").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>11:27 |
| \$30 | 7   | ("4421511"   "5306266"   "5417680"   "5462541"   "5520674"   "5624422"   "5674213"   "60736661"   "6017336"   "6022338"   "6133501").PN. and (hydrophilic wettable) and (hydrophobic nonwettable)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>11:30 |

| <b>331</b> | 12 | ((((non\$1 woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and<br>topsheet  | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/12<br>11:31 |
|------------|----|--|------------------------------|----|----|---------------------|
| S32        | 15 | ("4397644"  <br>"4634440"  <br>"5342334"  <br>"5352217"  <br>"538370"  <br>"5387209").PN. OR<br>("5449352").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>11:39 |
| \$33       | 33 | ("0808433"   "3157178"   "3279465"   "3824996"   "3824996"   "3828248"   "3992135"   "3967823"   "3968803"   "4282874"   "4341216"   "4347844"   "44045500"   "4665909"   "4665909"   "4681577"   "4829987"   "483773"   "5008652"   "5054129"   "5054129"   "5348547"   "5348547"   "5429593"   "5449352"   "5478335"   "5478335"   "5681579" | US-PCPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>11:45 |

|     |   | "6162960").PN. OR<br>("6849775").URPN.   |                    |    |    |                     |
|-----|---|--|--------------------|----|----|---------------------|
| S34 | 7 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and (first<br>with (aperture hole<br>vent perforat\$4<br>opening orifice outlet<br>passage recess<br>cavity)) and (second<br>with (porous (liquid<br>adj permeable)<br>(liquid adj pervious)))                   | US-POPUB;<br>USPAT | ŌR | ON | 2009/05/12          |
| S35 | 7 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(sheet layer web)))<br>same second) and<br>(first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and (first<br>with (aperture hole<br>vent perforat\$4<br>opening orifice outlet<br>passage recess<br>cavity)) and (second<br>with (porous ((liquid<br>fluid) adj permeable)<br>((liquid fluid) adj<br>pervious)) | US-POPUB;<br>USPAT | ŌR | ON | 2009/05/12<br>11:59 |

| <b>336</b> | 2 | ((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) and<br>(thermoplastic with<br>(sheet layer film)))<br>and (energy adj2<br>differen\$4) and ((non<br>\$1woven or (non adj<br>woven)) same<br>hydrophobic) and<br>(thermoplastic same<br>(hydrophilic))   | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>12:38 |
|------------|---|---|--------------------|----|----|---------------------|
| S37        | 0 | (((non\$1woven or (non adj woven)) with (sheet layer web) and ((thermoplastic with (film))) and (energy adj² differen\$4) and ((non\$1woven or (non adj woven)) same hydrophobic) and (thermoplastic same (hydrophilic))  | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>12:39 |
| S38        | 2 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((thermoplastic with<br>(film))) same second)<br>and (first with<br>(hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and (first<br>with (aperture hole<br>vent perforat\$4<br>opening orifice outlet<br>passage recess<br>cavity)) and (second<br>with (porous ((liquid<br>fluid) adj permeable)<br>((liquid fluid) adj<br>pervious))) | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12          |

| S39 | 53 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((second with (film<br>layer sheet))) and<br>(first with<br>(hydrophobic<br>nonwettable)) and (second with<br>(hydrophilic<br>wettable)) and (first<br>with (aperture hole<br>vent perforat\$4<br>opening orifice outlet<br>passage recess<br>cavity)) and (second<br>with (porous ((liquid<br>fluid) adj permeable)<br>(((liquid fluid) adj<br>pervious))) | US-PGPUB;<br>USPAT | OR . | ON | 2009/05/12<br>15:24 |
|-----|----|---|--------------------|------|----|---------------------|
| S40 | 20 | (((non\$1woven or<br>(non adj woven))<br>with (sheet layer<br>web) same first) and<br>((second with<br>(film)))) and (first<br>with (hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and (first<br>with (aperture hole<br>vent perforat\$4<br>opening orifice outlet<br>passage recess<br>cavity)) and (second<br>with (porous ((liquid<br>fluid) adj permeable)<br>(((iquid fluid) adj<br>pervious)))             | US-PGPUB;<br>USPAT | OR   | ON | 2009/05/12<br>15:26 |

| S41 | 14  | ((((non\$1 woven or<br>(non adj woven))<br>with (hydrophilic<br>wettable)) and<br>((second with<br>((film)))) and (first<br>with (hydrophobic<br>nonwettable)) and<br>(second with<br>(hydrophilic<br>wettable)) and (first<br>with (aperture hole<br>vent perforat\$4<br>opening orifice outlet<br>passage recess<br>cavity)) and (second<br>with (porous ((liquid<br>fluid) adj permeable)<br>((liquid fluid) adj<br>pervious))) | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>15:47 |
|-----|-----|--|--------------------|----|----|---------------------|
| S42 | 147 | (((nonwoven or (non adj woven)) with (hydrophilic nonwettable)) and (film with (hydrophilic wettable)) and ((nonwoven or (non adj woven)) with (aperture hole vent perforat\$4 opening orifice outlet passage recess cavity)) and (film with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj permeable) ((liquid fluid) adj pervious)))   | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>15:51 |
| S43 | 144 | ((nonwoven or (non adj woven)) with (hydrophilic nonwettable)) and (film with (hydrophilic wettable)) and ((nonwoven or (non adj woven)) with (aperture hole vent perforat\$4 opening orfice outlet passage recess cavity)) and  | US-PGPUB;<br>USPAT | OR |    | 2009/05/12<br>15:54 |

|     |     | (film with (porous<br>((liquid fluid) adj<br>permeable) ((liquid<br>fluid) adj pervious)))<br>and ((nonwoven or<br>(non adj woven))<br>with (sheet web<br>layer))  |                    |    | *************************************** |                     |
|-----|-----|--|--------------------|----|---|---------------------|
| S44 | 113 | (((nonwoven or (non adj woven)) with (hydrophilic nonwettable)) and (film with (hydrophilic wettable)) and ((nonwoven or (non adj woven)) with (aperture hole vent perforat\$4 opening orifice outlet passage recess cavity)) and (film with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))) and ((nonwoven or (non adj woven)) adj4 (sheet web layer)) | US-PGPUB;<br>USPAT | OR | ON                                      | 2009/05/12<br>15:55 |
| S45 | 86  | (((nonwoven or (non adj woven)) with (hydrophilic nonwettable)) and (film with (hydrophilic wettable)) and ((nonwoven or (non adj woven)) with (aperture hole vent perforat\$4 opening orifice outlet passage recess cavity)) and (film with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))) and ((nonwoven or (non adj woven)) adj2 (sheet web layer)) | US-PGPUB;<br>USPAT | OR | ON                                      | 2009/05/12          |

| S46 | 15  | ((nonwoven or (non adj woven)) with (hydrophilic nonwettable)) and ((hydrophilic and (non adj woven)) with (aperture hole vent perforat) opening orifice outlet passage recess cavity)) and (film with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))) and ((nonwoven or (non adj woven)) adj2 ((sheet web layer)) | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>15:56 |
|-----|-----|---|--------------------|----|----|---------------------|
| S50 | 1   | "5591149".pn. and hydrophobic   | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>16:05 |
| S51 | 182 | (first with (hydrophobic nonwettable)) and (second with (hydrophilic wettable)) and (first with (aperture hole vent perforat\$4 opening orifice outlet passage recess cavity)) and (second with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))   | US-PGPUB;<br>USPAT | OR | ON | 2009/05/12<br>16:07 |

| S52  | 22  | (first with (hydrophobic nonwettable)) and (second with (hydrophilic wettable)) and (first with (aperture hole vent perforat)\$4 opening orifice outlet passage recess cavity)) and (second with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))) and topsheet   | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/12<br>16:07 |
|------|-----|--|------------------------------|----|----|---------------------|
| S53  | 7   | ("5437653"  <br>"5486167").PN. OR<br>("5885267").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2009/05/12<br>16:15 |
| \$54 | 115 | (((first top upper) with (hydrophobic nonwettable)) and ((second lower bottom) with (hydrophilic wettable)) and ((first top upper) with (aperture hole vent perforat\$4 opening orifice outlet passage recess cavity)) and ((second lower bottom) with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))) and topsheet | US-PGPUB;<br>USPAT           | OR | ON | 2009/05/12<br>16:19 |

| S55 | 121 | (((first top upper) with (hydrophobic nonwettable)) and ((second lower bottom) with (hydrophilic wettable)) and ((first top upper) with (aperture hole vent perforat\$4 opening orifice outlet passage recess cavity)) and ((second lower bottom intermediate) with (porous ((liquid fluid) adj permeable) ((liquid fluid) adj pervious))) and topsheet                        | US-PGPUB;<br>USPAT           | OR   | ON | 2009/05/12<br>16:37 |
|-----|-----|--|------------------------------|------|----|---------------------|
| 886 | 219 | ("2391621"   "2576914"   "3165485"   "3165485"   "3224926"   "3287149"   "3339550"   "3417040"   "345776"   "3485706"   "349821"   "3520842"   "3556932"   "3556932"   "3556932"   "3695269"   "3700623"   "3700623"   "3700623"   "370976"   "3809089"   "3815897"   "3812000"   "3885158"   "389388"   "3929135"   "3967623"   "3967624"   "4041951"   "4113911"   "4117199" | US-PGPUB;<br>USPAT;<br>USCCR | OR . | ON | 2009/05/12          |

|   | "4129528"                |     | *****  |     |        |  |
|---|--------------------------|-----|--------|-----|--------|--|
|   | "4147586"                |     |        |     |        |  |
|   | "4208459"                |     |        |     |        |  |
|   | "4222921"                |     |        |     |        |  |
|   | "4342314"                |     |        |     |        |  |
|   | "4391869" i              |     |        |     |        |  |
|   | "4425130"                |     |        |     |        |  |
|   | "4445970" I              |     |        |     |        |  |
|   | "4524474"                |     |        |     |        |  |
|   | "4556450"                |     |        |     |        |  |
|   | "4588457"                |     |        |     |        |  |
|   | "4610915" I              |     |        |     |        |  |
|   | "4626254"                |     |        |     |        |  |
|   | "4675394"                |     |        |     |        |  |
|   | "4725473" I              |     |        |     |        |  |
|   | "4741941"                |     |        |     |        |  |
|   | "4781710"                |     |        |     |        |  |
|   | "4879170" I              |     |        |     |        |  |
|   | "4929495"                |     |        |     |        |  |
|   | "4929495"  <br>"4931355" |     |        |     |        |  |
|   |                          |     |        |     |        |  |
|   | "4981557"                |     |        |     |        |  |
|   | "5008344"                |     |        |     |        |  |
|   | "5011864"                |     |        |     |        |  |
|   | "5048589"                |     |        |     |        |  |
|   | "5069548"                |     |        |     |        |  |
|   | "5085736"                |     |        |     |        |  |
|   | "5156902"                |     |        |     |        |  |
|   | "5188625"                |     |        |     |        |  |
|   | "5230776"                |     |        |     |        |  |
|   | "5246545"                |     |        |     |        |  |
|   | "5302382"                |     |        |     |        |  |
|   | "5348620"                |     |        |     |        |  |
|   | "5368910"                |     |        |     |        |  |
|   | "5389202"                |     |        |     |        |  |
|   | "5399412"                |     |        |     |        |  |
|   | "5411636"                |     |        |     |        |  |
|   | "5423788"                |     |        |     |        |  |
|   | "5429686"                |     |        |     |        |  |
|   | "5431643"                |     |        |     |        |  |
|   | "5437653"                |     |        |     |        |  |
|   | "5454801"                |     |        |     |        |  |
|   | "5478335"                |     |        |     |        |  |
|   | "5491190"                |     |        |     |        |  |
|   | "5492598"                |     | ****** |     |        |  |
|   | "5501768"                |     |        | *** |        |  |
|   | "5516572"                |     |        |     |        |  |
| 1 | "5536555"                |     |        |     |        |  |
|   | "5552020 <b>"</b>        |     |        |     | ****** |  |
|   | "5562645"                |     |        |     |        |  |
|   | "5591306"                |     | *****  |     |        |  |
|   | "5591309"                |     | *****  |     |        |  |
| 1 |                          | i . | 1      | }   | 8      |  |

| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | *************************************** | "5598643"  <br>"5601871"  <br>"5635191"  <br>"5653930"  <br>"5667636"  <br>"5670110").PN. OR<br>("5990377").URPN. | *************************************** |    | -  |                     |
|---|---|---|---|----|----|---------------------|
| S57                                     | 0                                       | "5990377".pn. and<br>"Fig. 5"   | US-PGPUB;<br>USPAT                      | OR | ON | 2009/05/12<br>17:56 |
| S58                                     | 1                                       | "5990377".pn. and<br>"5"  | US-PGPUB;<br>USPAT                      | OR | ON | 2009/05/12<br>17:56 |

## 5/12/2009 6:36:34 PM

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